

Amendments to the Specification:

Please replace the paragraph beginning at page 19, paragraph [0052] as with the following amended paragraph:

[0052] Based on the possible sampling phases, there can be two different targets for a modified Viterbi detector, both targets being approximate targets. The table 900 shows the targets for peak sampling and shoulder sampling in the fifth and sixth columns, respectively. FIGS. ~~14 and 15~~ 14-1, 14-2, 15-1 and 15-2 illustrate the phase uncertainty tolerance for simulations of traditional Viterbi detection and modified Viterbi detection. Peak sapling is assumed in the simulations, and thus the corresponding target in the fifth column of the table 900 is used. Both detection techniques are tested using all possible sampling phases and sixteen time over-sampling; thus, there are sixty four sampling phases that cover a complete symbol duration with sixteen times over-sampling.